

CLAIMS

1. A method of connecting an electronic part,
comprising:

5 forming an electroless nickel plating coat
containing phosphorous on a substrate metal layer which
constitutes a connecting terminal of an electronic part;
and

10 carrying out connecting to the nickel plating coat
through a lead-free solder,
wherein a half-width of X-ray diffraction of a (111) plane
of Ni crystal in the nickel plating coat is 5 degrees or
less.

15 2. The connecting method according to Claim 1,
wherein the plating coat is formed using an electroless
nickel plating solution containing 5.5 mass% or less of
phosphorous.

20 3. The connecting method according to Claim 1,
wherein the plating coat is formed using an electroless
nickel plating solution containing 4.5 mass% or less of
phosphorous.

25 4. The connecting method according to Claim 1,

wherein the X-ray diffraction half-width of the (111) plane of Ni crystal of the nickel plating coat is within a range of 4 degrees to 2 degrees.

5 5. The connecting method according to Claim 1, wherein annealing is carried out at a temperature of 150°C or more, after the electroless nickel plating coat is formed.

10 6. The connecting method according to Claim 1, wherein annealing is carried out at a temperature of 250°C to 400°C, after the electroless nickel plating coat is formed.